

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-002369**Date Inspected:** 23-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coating Inspection**Bridge No:** 34-0006**Component:** Office, OBG 7BE, OBG 6CW, Sub-Assembly**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Lift 4 East

Check Dry Film Thickness (DFT) on test areas of Side Plate Weld Seam of applied Interzinc 52 for pull off testing. DFT range was observed between 100-157um on the test areas.

Office

Meeting with Caltrans personnel to discuss coatings related issues relative to repairs for first shipment scheduled to depart in December.

OBG 7BE

Internal adhesion retest of failed area of Interzinc 22 undercoat was in excess of 4Mpa.

Sub-Assembly

OBG 6CW Cross Beam Bottom Plate Base Metal surfaces were washed and de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting operations.

Lift 2 West

Internal repairs of damaged previously applied coatings was repaired via abrasive blasting to Base Metal and also to remove "Rust Stain" and re-application of Interzinc 22 was performed on Panel Points#16-17 "T" Stiffeners and Longitudinal Diaphragms on the Bottom Plate.

Lift 3 West

Cross Beam termination and FL-3 Beams were repaired with Interzinc 22 and also the exposed bolt holes were

---

## SOURCE INSPECTION REPORT

( Continued Page 2 of 2 )

---

coated with Interzinc 52. Cleaning of the Bottom Plate was also in process. Caulking was also applied at the FL-3/Bottom Plate crevices.

### Lift 4 West

Cross Beam termination and FL-3 Beams were repaired with Interzinc 22 and also the exposed bolt holes were coated with Interzinc 52. Cleaning of the Bottom Plate was also in process. Caulking was also applied at the FL-3/Bottom Plate crevices.

### Lift 3 West

Performed an initial condition survey with ABF Bill Oak to ascertain quantity of repairs. Large amounts of water were observed on the internal floor stiffeners below the Upper Corner Units the stiffeners were filled to the top.

### Office

Attend to project documentation and report writing.

Note: All Inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

### Summary of Conversations:

Caltrans QA Lumley inquired with ABF QA Bill Oak as to affixing dollies onto Lift 4 East weld seam area for adhesion testing of hand tool cleaned areas.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (\*58) 699-9549, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Lumley,James	Quality Assurance Inspector
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

---